Remarks

No new matter is believed to be added to the application by this Amendment.

Status of the Claims

Claims 1-4, 6-11, 14-21, 23 and 24 are pending in the application. Support for the amendments to claims 1, 10, 11 and 21 can be found at page 5, lines 8-14 of the specification.

Rejection under 35 U.S.C. § 102(e) over Shinji

Claims 1-4, 6-11, 14-21, 23 and 24 are rejected under 35 U.S.C. § 102(e) as being anticipated by Shinji et al. (U.S. Patent No. 6,259,854 B1). Applicant traverses.

Distinctions of the invention over Shinji et al. are record in the application. Further to these distinctions, the independent claims the invention have been amended to set forth that light reflected along an orthogonal direction to the liquid crystal panel is maximized when the angle equals 90° ($\delta = 0°$).

Although Shinji et al. at column 6, lines 61-62 states that "the slope angle of the trapezoid $\delta \geq 5°$", "Shinji et al. fails to disclose or suggest an angle between a lower surface and a surface connecting the planer surface of the

complex portion of about 90° (δ = 0°)". Further, Shinji et al. fails to disclose or suggest the maximization of the light in a direction orthogonal to the liquid crystal display when the angle equals 90° (δ = 0°).

As a result, Shinji et al. fails to anticipate the invention as set forth in independent claims 1, 10, 11 and 21. Claims dependent upon these independent claims are patentable for at least the above reasons alone.

Accordingly, this rejection is overcome and withdrawal thereof is respectfully requested.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner, Ph.D. (Reg. No. 42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit

Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By _____
Joseph A. Kolasch
Reg. No. 22,463

JAK/REG:sld

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

Attachment: Version With Markings Showing Changes Made

VERSION WITH MARKINGS SHOWING CHANGES MADE

In the Claims

The claims have been amended as follows:

1. (Three Times Amended) An auxiliary light source device for a reflective liquid crystal display device having a reflector, the auxiliary light source device comprising:

a light source; and

a light directing member for directing incident light from the light source toward the reflector, the light directing member including,

a lower surface having a plurality of convex portions extending from the lower surface, each of the convex portions having a substantially planar surface which is substantially parallel to the lower surface, and an angle between the lower surface and a surface connecting the planar surface of the convex portion is about 90°**, wherein light reflected along an orthogonal direction to the liquid crystal display device is maximized**.

10. (Three Times Amended) A reflective liquid crystal display device, comprising:

a display panel including two substrates spaced apart, liquid crystal sandwiched between the two substrates, and a reflector to reflect light through the liquid crystal; **[and]**

an auxiliary light source device for supplying light to the display panel, including,

a light source,

a light directing member for directing incident light from the light source toward the display panel, the directing member having a lower surface having a plurality of convex portions, each having a substantially planar surface which is substantially parallel to the lower surface, an angle between the lower surface and a surface connecting the planar surface of the convex portion being about 90°**, wherein light reflected along an orthogonal direction to the display panel is maximized;[,]** and

a light reflecting member which guides light from the light source into the light directing member.

11. (Three Times Amended) An auxiliary light source device for a reflective liquid crystal display device having a reflector, the auxiliary light source device comprising:

an upper reflective surface to reflect impinging light above a certain incidence angle;

a lower reflective surface having a plurality of convex portions extending toward the reflector to direct light from the auxiliary light source device to the reflector; and

an entry surface connecting the upper and lower reflective surfaces through which light from a light source enters, wherein each convex portion includes a planar portion and sides connecting the planar portion with the lower reflective surface, and an angle between the lower surface and the sides is about 90°, **wherein light reflected along an orthogonal direction to the liquid crystal display device is maximized**.

21. (Twice Amended) An auxiliary light source device for a reflective liquid crystal display device having a reflector, the auxiliary light source device comprising:

a light source extending along a width of the reflector, to emit light along a length of the reflector; and

a light directing device located above the reflector and adjacent to the light source to direct light from the light source to the reflector such that a light distribution of light directed by the light directing device is substantially uniform along the length of the reflector, and such that the directed light is substantially perpendicular to the reflector, and the light directing device includes a plurality of portions extending toward the reflector **at a 90° angle such that the light reflected along an orthogonal direction to the liquid**

crystal display device is maximized, a spacing between the portions decreasing along the length of the reflector with increasing distance from the light source.